

## REMARKS/ARGUMENTS

### Claim Status and Amendment to the Claims

Claims 1-58 are now pending.

The Examiner is thanked for his kind finding of allowable subject matter in claims 9-11, 23-30, and 39-41 if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 1, 3, 12-14, 31, 33, and 42-43 have been amended to further particularly point out and distinctly claim subject matter regarded as the invention. The text of claims 2, 4, 15-18, 32, and 34 is unchanged, but their meaning is changed because they depend from amended claims. Claims 5-11, 19-30, 35-41, and 44 remain unchanged.

New claims 45-58 have been added by this amendment and also particularly point out and distinctly claim subject matter regarded as the invention. The amendment also contains minor changes of a clerical nature.

No "new matter" has been added by the amendment.

### The 35 U.S.C. §103 Rejection

Claims 1-8, 12-22, 31-38, and 42-44 stand rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over Lin et al. (U.S. Pat. No. 6282575 ) and Lemaire et al. (U.S. Pat. No. 6208149 ) in further view of Martin (U.S. Pat. No. 6154776), among which claims 1, 3, 5, 12, 19, 31, 33, 35, 42-44 are independent claims. This rejection is respectfully traversed.

According to M.P.E.P. §2143,

To establish a *prima facie* case of obviousness, three basic criteria must be met. First there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in the applicant's disclosure.

Furthermore, the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990).

Claim 1 defines a method for setting Quality of Service (QoS) bits of packets sent by a user of a data communications network. The claimed method comprises (a) obtaining a user service profile including a QoS level for the user in response to a user log-in attempt to a service selection gateway (SSG), the QoS level being associated with the user regardless of a source address of packets originated by the user, (b) routing all packets originated by the user through the SSG during a session, (c) setting, in the SSG, the QoS bits of packets originated by the user in accordance with the QoS level for the user, and (d) passing, after said QoS bits have been set, said packets on to the data communications network, as recited in Claim 1 as amended.

*Lin* is allegedly teaches a method and apparatus for a general routing management in a network. The Examiner specifically equates *Lin*'s network access server (NAS) 104

with the claimed service selection gateway (SSG). In *Lin*, the NAS 104 receives authentication packets (the alleged service profile) from an authentication server 102 when a client 108 sends login information to the NAS 104 (FIG. 2, blocks 202 and 204 in FIG. 3 of *Lin*). However, as the Examiner correctly acknowledged in the Office Action, *Lin* fails to teach or suggest the user service profile including a QoS level, and setting, in the SSG, the QoS bits of packets originated by the user in accordance with the QoS level for the user.

However, the Examiner relies on *Lemaire* and *Martin* for the above-mentioned features missing from *Lin*, and alleges that it would have been obvious to implement teachings of *Lemaire* and *Martin* into *Lin* to obtain the claimed invention. The Applicants respectfully disagree for the following reasons.

Regarding *Lemaire*, the Examiner alleges that *Lemaire* teaches setting the QoS information in header, which the Examiner interprets as “inserting bit into header, for data units that are associated with a flow” (column 1, lines 30-41 of *Lemaire*). However, as the Examiner correctly quoted in his citation, *Lemaire*’s QoS information inserted into the data units is associated with a “flow” having identified Source Address and Destination Address (column 1, lines 48-49 thereof). Thus, in *Lemaire*, the source address and the destination address in a data unit (Ethernet frame) must be positively identified (column 7, lines 54-55 thereof), based on which the QoS information (QoS variable) is obtained (column 8, lines 6-8 and 10-14 of *Lemaire*). Since the QoS information (alleged QoS level) is associated with the source and destination addresses

and indexed in the memory accordingly in *Lemnaire*, the alleged QoS level in *Lemnaire* is static and pre-fixed with respect to a specific source and destination address. Thus, *Lemnaire*'s teaching precisely falls within the conventional art in which QoS level is based solely on pre-programmed IP addresses, as discussed in the first two paragraphs of page 4 of the present specification. Accordingly, *Lemnaire* fails to teach or suggest setting the QoS bits of packets originated by the user in accordance with the QoS level, where the QoS level is associated with the user regardless of a source address of packets originated by the user, as recited in claim 1. (1)

Regarding *Martin*, the Examiner alleges that column 11, lines 13-17 of *Martin* teaches the user profile including QoS level. The Examiner seems to equate *Martin*'s directory having QoS identifications (alleged QoS level). A QoS identification is then used to access a corresponding QoS definition (column 10, lines 30-44 of *Martin*), and the QoS definition of the rules are enforced to route the data flow. However, in *Martin*'s directory, each entry ("entity entry") of the QoS identification is associated with a key which is derived from a flow or flow parameters such as source and destination IP addresses and ports (column 11, lines 11-15, and column 10, lines 14-18 thereof). Thus, similarly to *Lemnaire*, *Martin*'s QoS identification is only associated with a data flow ("flow-entity binding," column 11, lines 13-14 thereof), i.e., a specific set of addresses, not a user, as claimed in claim 1. Accordingly, *Martin* fails to teach or suggest the claimed user service profile including a QoS level for the user, where the QoS level is associated with the user regardless of a source address of packets originated by the user, as recited in claim 1. (1)

Accordingly, even if *Lin* should be modified by the alleged teachings of *Lemaire* and *Martin*, such an alleged combination would not yield the claimed invention as recited in claim 1.

Claim 5 defines method for setting Quality of Service (QoS) bits of packets sent by a user of a data communications network. The claimed method includes (a) receiving, at a service selection gateway to which the user is in communication, a request from the user to assign a particular Quality of Service level to at least one packet flow transmitted by the user, (b) assigning, in response to said request, a Quality of Service level to said at least one packet flow, (c) setting said QoS bits within said packets belonging to said at least one packet flow received at the service selection gateway in accordance with said Quality of Service level, and (d) transmitting said packets belonging to said at least one packet flow to the data communications network, as recited in claim 5.

As discussed above, *Lin* fails to teach setting the QoS bits in accordance with the QoS level for the user. *Lin* lacks any teaching or suggestion regarding QoS level. In *Martin*, as discussed above, the QoS identification is derived from a data flow and used to apply the QoS rules to that data flow (column 11, lines 24-25 of *Martin*) so as to be routed in accordance with the QoS. Thus, thus the alleged QoS level in *Martin* (or allegedly corresponding QoS bits) is not set (or modified) in the packets of the data flow, as recited in claim 5. In addition, as discussed above, in a routing system in both of *Lemaire* and *Martin*, when a data flow is received the alleged QoS level (QoS

information of QoS identification) is automatically derived from the data flow based on the source and destination addresses (and other flow parameters) thereof, using a look-up table or directory. Thus, no request is made by the user to set or assign a specific QoS level, and thus there is no suggestion of such a request in either *Lemaire* or *Martin*. In addition, none of the citer references teach or suggest setting QoS bits in response to such a request to set or assign a specific QoS level.

Accordingly, any combination of *Lin*, *Lemaire*, and *Martin* fails to teach or suggest receiving, at a service selection gateway to which the user is in communication, a request from the user to assign a particular Quality of Service level to at least one packet flow transmitted by the user, and assigning, in response to said request, a Quality of Service level to said at least one packet flow, as recited in claim 5.

Claims 3, 12, 31, 33, and 42-43 include substantially the same distinctive features as claim 1 described above. Claims 19, 35, and 44 include substantially the same distinctive features as claim 5 described above.

Accordingly, it is respectfully requested that the rejection of claims based on *Lin*, *Lemaire*, and *Martin* be withdrawn. In view of the foregoing, it is respectfully asserted that the claims are now in condition for allowance.

#### Dependent Claims

Claim 2 depends from claim 1, claim 4 depends from claim 3, claims 6-8 (and 9-

11) depend from claim 5, claims 13-18 depend from claim 12, claims 20-30 depend from claim 19, claim 32 depends from claim 31, claim 34 depends from claim 33, and claims 36-41 depend from claim 35, and thus include the limitations of the corresponding independent claims. The argument set forth above is equally applicable here. The base claims being allowable, the dependent claims must also be allowable at least for the same reasons.

In view of the foregoing, it is respectfully asserted that the claims are now in condition for allowance.

#### Request for Allowance

It is believed that this Amendment places the above-identified patent application into condition for allowance. Early favorable consideration of this Amendment is earnestly solicited.

#### Allowable Subject Matter

The Examiner is thanked for the kind allowance of claims 9-11, 23-30, and 39-41 if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicants acknowledge the Examiner's statement of reasons for allowance as set forth in the Office Action. However, Applicants point out that the reasons for allowability of the above referenced claims are not limited to the reasons for allowance as set forth in the Office Action, and that additional reasons for allowability

may exist, each of which may be independently sufficient to establish the patentability of one or more pending claims.

Applicants respectfully reserve the right to introduce, articulate, or otherwise comment on any such additional reasons for allowance as may be appropriate in any future proceedings concerning the claimed invention.

If, in the opinion of the Examiner, an interview would expedite the prosecution of this application, the Examiner is invited to call the undersigned attorney at the number indicated below.

The Commissioner is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number 50-1698.

Respectfully submitted,  
THELEN REID & PRIEST, LLP

Dated: April 28, 2004



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Limited Recognition under 37 CFR §10.9(b)

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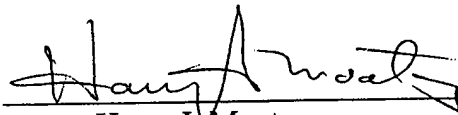
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**Expires: August 27, 2004**

  
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